

The Leiden Institute of Advanced Computer Science (LIACS) is the computer science institute of Leiden University, one of the eight research institutes of the Faculty of Science. It is engaged in research and education in the area of Computer Science, including Bio-informatics and Innovation Management. It collaborates with several national and international institutes, and has formal affiliations with the national research schools Advanced School for Computing and Imaging (ASCI) and the Institute for Programming Research and Algorithmics (IPA). The research areas of LIACS range from theoretical to applied computer science with the research clusters Algorithms and Foundations of Software Technology, Computer Systems, Imagery and Media, and Technology Innovation Management.

The **BiG Grid project** is setting up e-science infrastructures for scientific research, which contain sophisticated ICT research components crucial to scientific research communities. This research infrastructure consists of advanced compute clusters and extensive data storage, combined with specific middleware and software to enable e-science based research. The BiG Grid project is a joint project of NCF, Nikhef and NBIC.

The **Netherlands Bioinformatics Centre (NBIC)**, active since 2003, is a collaborative institute of bioinformatics groups in the Netherlands. Together, these groups perform cutting-edge research, develop novel tools and support platforms, create an e-science infrastructure and educate the next generations of bioinformaticians. NBIC's BioAssist program supports the bioinformatics needs of Netherlands Genomics Initiative (NGI), and by this ultimately supports all researchers that need bioinformatics in The Netherlands.

The **e-BioGrid project** is a multicenter e-bioscience project at the intersection of the BiG Grid project and NBIC BioAssist program. Its main objective is to create functional problem-solving environments for life-science application domains that consist of a coherent arrangement of bioinformatics components and connective e-science elements, with access to grid/cloud computational power, storage and connectivity. The project consists of an e-core, with three e-architects and five technical application domains within the life-science omics and systems biology fields. The e-architects will supervise the multidisciplinary e-BioGrid project using their collective expertise of e-infra (SARA), e-science (Leiden University), and e-bioscience & life sciences (University of Amsterdam). At the same time they will be responsible for the future embedding of e-bioscience in national initiatives, such as the e-Science Research Center.

Within the e-BioGrid project we are currently offering two positions:

**Senior Bioinformatician/Computational Biologist (University of Amsterdam)**

**Senior Computer Scientist/e-Scientist (Leiden University)**

for 32-38 hours/week, for a period of 2,5 years

The Senior Bioinformatician/Computational Biologist will be the e-architect that is responsible for the e-bioscience and life-science aspects, whereas the Senior Computer Scientist/e-Scientist will be the e-architect for the e-science aspects. Together with an informatician from SARA they will form the e-core and supervise the e-BioGrid project. The main challenge will be to introduce the e-science concept into life sciences research and as such reshape the way omics-based biological research is conducted. This will be achieved by using interesting, high-profile biological use cases.

The Senior Bioinformatician will be based at the Microarray Department and Integrative Bioinformatics Unit of the University of Amsterdam.

The Senior Computer Scientist will be based at the computer science institute LIACS of Leiden University.

### **Objectives e-core**

The objectives the e-BioGrid program aims to achieve are:

- Realize the connection between the NBIC-BioAssist and BiG Grid programs.
- Prove the usefulness of this connection via functional problem-solving environments in exciting biological use cases.
- Make e-bioscience technology available in the life science domain through collaboration with many expert bioinformaticians and expert life scientists.
- Mold a national support basis & knowledge pool for e-bioscience.

### **Tasks e-core**

The e-core tasks entail research, technical, managerial, and organizational tasks:

- Ensure the technical development of generic problem-solving environments in selected life-science technology areas.
- Keep up with e-science research and development to enhance future e-bioscience developments in the life sciences.
- Guide, monitor and manage the e-BioGrid project.
- Bundle the existing Dutch e-bioscience community and strive to extend this community.
- Guide and stimulate newcomers to develop their own problem-solving environments on the BiG Grid infrastructure.
- Shape a future e-bioscience Core, for instance as part of national initiatives.

### **Requirements**

- PhD in computer science/bioinformatics or (computational) biology.
- Proven track record in bioinformatics, e-science, and/or e-bioscience.
- Experience as an independent researcher.
- Affinity with life-science research.
- Good communicative skills.

### **We offer**

We offer a position for 2.5 years in a challenging environment. Appointment will be according to the terms of the Collective Labour Agreement of Dutch Universities (CAO Nederlandse Universiteiten). The salary will be set, depending on education and work experience, between the gross minimum of € 3.195,- and gross maximum of € 4.374,- per month, based on fulltime employment (salary scale: 11). Appointments at a higher entry level (scale 12 max.) are negotiable for exceptionally qualified candidates. An appointment with the University of Amsterdam as well as with Leiden University includes a pension build-up and facilitates other benefits such as an annual holiday premium of 8% and an end-of-year premium of 8.3%.

### **Further information and applications**

For more detailed information regarding this position you are invited to contact: Dr. Timo Breit, group leader MAD & IBU @ UvA: +31-20-525.7058, [t.m.breit@uva.nl](mailto:t.m.breit@uva.nl) or Prof. Dr. Joost Kok @ Leiden University: +31-71-527.7057, [joost@liacs.nl](mailto:joost@liacs.nl).

Additionally, you can visit the websites of UvA and LIACS: [www.uva.nl](http://www.uva.nl) and [www.liacs.nl](http://www.liacs.nl). More information about employment at Leiden University can be found at: [www.staff.leiden.edu](http://www.staff.leiden.edu)

Please apply by sending your written application before 31 october 2010, using the vacancy number, including a covering letter of intent with your research interest, motivation and related experience, a full Curriculum Vitae and the names and phone numbers of three references (who have agreed to be contacted) to:

LIACS

To the attention of: Secretary

Preferably by email: [secr@liacs.nl](mailto:secr@liacs.nl)

Or by regular mail:

LIACS

P.O.Box 9512

2300 RA Leiden / The Netherlands

*We regret that, due to restrictions in our recruitment budget, we will be unable to consider candidates who are not resident in Europe at the time of application.*